

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008801**Date Inspected:** 01-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Li Jia	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes No N/A	
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes No N/A	
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes No N/A	
Approved Drawings:	Yes No N/A	Approved WPS:	Yes No N/A	
		Delayed / Cancelled:	Yes No N/A	

Bridge No: 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Lift 2 (West)

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plate North (West side) at PP 15 for Segment 2AW. Inspected 10% on a random basis and found the tension to be in general compliance. Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final Torque required is 520 N-m, M22 x 75 RC Set# DHGM220005 and final torque required is 473 N-m. Manual Torque wrench is been used with Sr. No. XQ2-584.

Segment 5BE to 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Edge Panel to Edge Panel Cross Beam (CB) Side and Bike Path (BK) Side. The weld joint no. OBE 5-006 (CB Side) and OBE 5-010 (BK Side) welding is in progress. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T.

Segment 1AW

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This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Weld connecting Deck Panel Diaphragm to the Floor Beam Flange for Segment 1AW at PP 8.5. The weld joint no. SSD34A-PP 8.5-003 welding was in progress. The welder is identified as 048801. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U5-F.

Segment 1AE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Deck Panel Diaphragm to the Floor Beam Flange. The weld joint no. SSD34A-PP8.5-153 and SSD34-PP8.5-153 welding was in progress. The welder is identified as 050316 and 658245. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U4b-FCM.

Segment 4BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Side Panel to Side Panel (Counter Weight and Cross Beam Side) and Bottom Panel to Bottom Panel for all the Cracks found by MPT at hold back areas between PP 25 and PP26. The welding is being carried out against B-CWR 699 Rev.0 and noticed welding is in progress. The welder is identified as 067571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G (2F)-Repair and WPS-345-SMAW-2G(2F)-FCM-Repair.

Segment 5CE

This Quality Assurance (QA) Inspector observed at 5CE and at PP36 North and South side Upper and Lower Chevrans bolts installation ASTM A 325 being carried out after cleaning the faying surfaces between the box section and splice plates fitted to Floor Beam.

Segment 5BE and 5CE

This Quality Assurance (QA) Inspector observed at 5BE to 5CE Side Panel (North and South Side) and Bottom Panel T-Ribs Web to Web tack welded and Hold Back areas cleaning and buffing in progress to facilitate welding.

Segment 5BW and 5CW

This Quality Assurance (QA) Inspector observed at 5BW to 5CW Cross Beam Side weld connecting Side Panel to Bottom Panel Welding was in progress and touch up weld being performed for Base Metal damaged areas.

Segment 5CE

This Quality Assurance (QA) Inspector observed at 5CE at PP 35 Bike Path side Clips connecting Side Panel to Floor Beam, Bolts installation was in progress.

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Segment 3AW

This Quality Assurance (QA) Inspector observed at 3AW between PP 21 and PP22 Cross Beam side, Side Panel to Side Panel T-Ribs Hold Back areas MPT test carried out by ABF QA and Found Linear indications for the same 7th T-Rib from Longitudinal Stiffener Fillet weld being Grinded and Welded.

Segment 3AW

This Quality Assurance (QA) Inspector observed at 3AW between PP 19 to PP 22 Cross Beam side X37A Road Barrier Angle Bracket connected at corner assembly deck panel side all the Cope Holes being filled by Silicone Paste for Painting purpose.

Segment 2AW

This Quality Assurance (QA) Inspector observed at Segment 2AW at PP 15 Counter Weight Side Lower Chevron bolts being removed. So as to rectify the Splice Plate bending by adding Shims for West Side splice.

Segment 2AW

This Quality Assurance (QA) Inspector observed at Segment 2AW at PP 13 Hold Back area for Counter Weight and Cross Beam Side MPT test for Longitudinal Shear Plate is in progress by ABF QA.

Segment 1BW

This Quality Assurance (QA) Inspector observed at Segment 1BW at PP 12.5 Segment Hold Back areas welds MPT test for Side Panel "I" Rib by ZPMC QC was in progress and between PP 10 and 10.5 Hold Back Areas MPT Test by ABF QA.

Segment 1BE

This Quality Assurance (QA) Inspector observed at Segment 1BE at PP 12.5 Deck Panel Diaphragm to Floor Beam Flange welded areas MPT Test was in progress.

Segment 1AE

This Quality Assurance (QA) Inspector observed at Segment 1AE at PP 8.5 Sea Fasteners structures bolt tightening in progress.

Segment 4AW and 4BW

This Quality Assurance (QA) Inspector observed at Segment 4AW and 4BW between PP 25 and PP 26 all Hold Back areas MPT test being carried out and indications found area repair work was in progress against BCWR-699.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
